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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,066	05/07/2001	Tongwei Liu	HP-10012392	2859

7590 09/20/2006

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Intellectual Property Administration
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EXAMINER

LE, MIRANDA

ART UNIT	PAPER NUMBER
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2167

DATE MAILED: 09/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/851,066

Applicant(s)

LIU ET AL.

Examiner

Miranda Le

Art Unit

2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/14/06 has been entered.

This communication is responsive to Amendment, filed 07/14/06.

2. Claims 23-38 are pending in this application. Claims 23, 29, 34 are independent claims. In the Amendment, claims 23-38 have been added, and claims 1-22 have been cancelled. This action is made non-Final.

Claim Objections

3. Claim 1 is objected to because of the following informalities: Claim 1, lines 9-10, “*if said record does not comprise information for variables sufficient for use by the first classification tool such that the first classification tool cannot be used...*” should be changed to “*if said record does not comprise information for variables sufficient for use by the pre-computed first classification tool such that the first classification tool cannot be used...*”.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

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Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title.

5. Claims 34-38 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

In the specification, paragraph [0022], applicant intends for the medium to cover signals, waves, transmission media which is reasonably interpreted as a form of energy. A computer-usable medium including a carrier wave, or signal, is non-statutory subject matter as set forth in MPEP 2106 (IV)(B)(2)(a). As such, claim 34 is not limited to tangible embodiments, instead being sufficiently broad so as to encompass intangible media such as transmission media; the claim is not limited to statutory subject matter and is therefore non-statutory.

Claims 35-38 incorporate the deficiencies of claim 34; and do not add tangibility to the claimed subject matter, they are likewise rejected.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless:

(e) the invention was described in

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 23-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Srivastava (US Patent No. 6,563,952).

Srivastava anticipated independent claims 23, 29, 34 by the following:

As per claim 23, Srivastava teaches a method, comprising:

a processor (*Fig. 1*) receiving a record comprising a plurality of variables (*i.e. entries, attributes, col. 3, lines 13-28*), wherein said record comprises information for at least some of said variables (*Figs. 3,4*);

said processor determining if said record comprises information for variables sufficient for use by a pre-computed first classification tool adapted to classify said record (*i.e. identifies the use of large item sets, col. 3, lines 40-55*);

if said record comprises information for variables sufficient for use by the pre-computed first classification tool adapted to classify said record, said processor using said first classification tool to classify said record (*i.e. Steps 102, 104, 106, 110, 113, 114; Steps 102, 104, 106, 112, 113, 114; Steps 102, 104, 106, 110, 112, 113, 114; Fig. 2, col. 3, line 40 to col. 4, line 6*); and

if said record does not comprise information for variables sufficient for use by the first classification tool such that the first classification tool cannot be used to classify said record, then said processor building a second classification tool to classify said record and classifying said record using said second classification tool (*i.e. neither large item sets and clusters; Steps 102, 104, 106, 113, 114, Fig. 2, col. 3, line 40 to col. 4, line 6*).

As to claims 29, 34, Srivastava teaches a computer system comprising:

a bus (*Fig. 1*); and

a processor (*Fig. 1*) coupled to said bus, said processor executing a method for classifying an information record, said method comprising:

receiving from the bus a record comprising a plurality of variables (*i.e. entries, attributes, col. 3, lines 13-28*), wherein said record comprises information for at least some of said variables (*Figs. 3, 4*);

determining if said record comprises information for variables sufficient for use by a pre-computed first classification tool adapted to classify said record (*i.e. identifies the use of large item sets, col. 3, lines 40-55*);

if said record comprises information for variables sufficient for use by the pre-computed first classification tool adapted to classify said record, using said first classification tool to classify said record (*i.e. Steps 102, 104, 106, 110, 113, 114; Steps 102, 104, 106, 112, 113, 114; Steps 102, 104, 106, 110, 112, 113, 114; Fig. 2, col. 3, line 40 to col. 4, line 6*); and

if said record does not comprise information for variables sufficient for use by the pre-computed first classification tool adapted to classify said record, then building a second classification tool to classify said record and classifying said record using said second classification tool (*i.e. neither large item sets and clusters; Steps 112, 104, 106, 113, 114, Fig. 2, col. 3, line 40 to col. 4, line 6*).

As to claims 24, 30, 35, Srivastava teaches said processor building said second classification tool comprises using only those variables that have information present in said

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received record to build said second classification tool (*i.e. neither large itemsets and clusters; Steps 112, 104, 106, 113, 114, Fig. 2, col. 3, line 40 to col. 4, line 6*).

As to **claims 25, 31, 36**, Srivastava teaches said first classification tool and said second classification tool are a first classification tree and a second classification tree, respectively (*col. 4, lines 35-67*).

As to **claims 26, 32, 37**, Srivastava teaches computing said second classification tree using information for only a subset of said plurality of variables (*Fig. 3*).

As to **claims 27, 33, 38**, Srivastava teaches pre-computing said first classification tree using a substantially complete set of information for said plurality of variables (*col. 3, line 13 to col. 4, line 6*).

As per **claim 28**, Srivastava teaches said record comprises customer information for a client, and wherein said method further comprises selecting content for delivery to a customer according to said classifying of said record (*Fig. 1; col. 1, lines 31-55; col. 4, line 17-28*).

Response to Arguments

8. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Miranda Le whose telephone number is (571) 272-4112. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

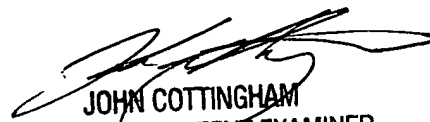
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Cottingham, can be reached on (571) 272-7079. The fax number to this Art Unit is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Miranda Le
September 12, 2006



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